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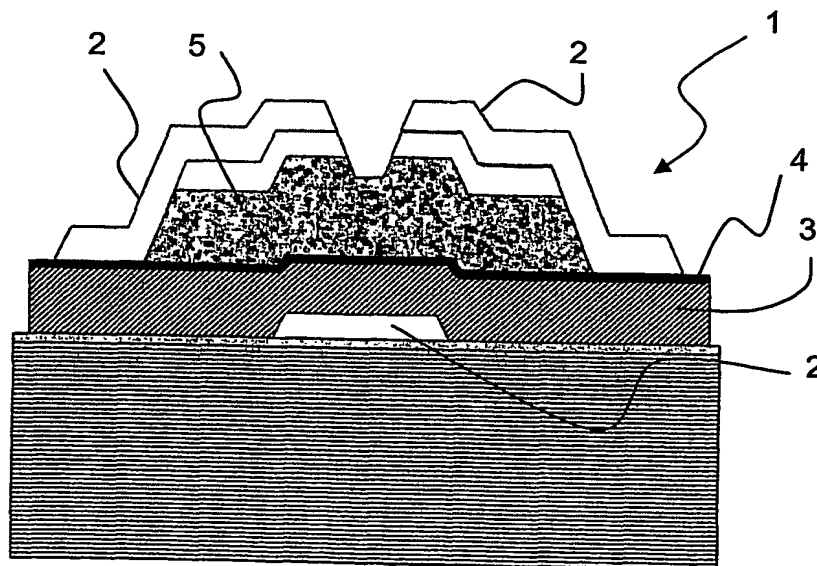
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(54) Title: TRANSISTOR FOR ACTIVE MATRIX DISPLAY AND A METHOD FOR PRODUCING SAID TRANSISTOR



(57) Abstract: The invention concerns a transistor for active matrix display and a method for producing the said transistor (1). The transistor (1) comprises a microcrystalline silicon film (5) and an insulator (3). The crystalline fraction of the said microcrystalline silicon film (5) is above 80%. According to the invention, the transistor (1) comprises a plasma treated interface (4) located between the insulator (3) and the microcrystalline silicon film (5) so that the said transistor (1) has a linear mobility equal or superior to 1.5 cm<sup>2</sup>V<sup>-1</sup>s<sup>-1</sup>, shows threshold voltage stability and wherein the microcrystalline silicon film (5) comprises grains (6) whose size ranges between 10 nm and 400 nm. The invention concerns as well a display unit having a line-column matrix of pixels that are actively addressed, each pixel comprising at least a transistor

as described above.

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